

**Amendments To The Claims:**

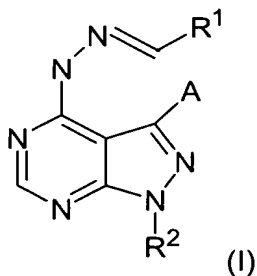
DT01 Rec'd PCT/PTC 20 JAN 2005

This listing of claims will replace all prior versions, and listings, of claims in the application:

**In the Claims:**

What is claimed is:

Claim 1 (Original): A compound of Formula (I)

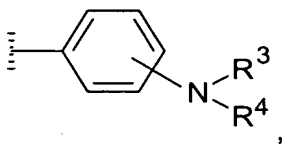


including salts, solvates, and pharmaceutically acceptable derivatives thereof,

wherein A is H, alkyl, or aryl;

R<sup>1</sup> is D<sup>1</sup>, D<sup>2</sup>, D<sup>3</sup>, D<sup>4</sup>, or D<sup>5</sup>,

wherein D<sup>1</sup> is



and R<sup>3</sup> and R<sup>4</sup> are each independently H, alkyl, alkylsulfonyl, or -C(O)-(CH<sub>2</sub>)<sub>x</sub>-R<sup>5</sup>,

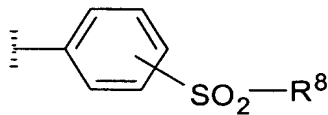
where R<sup>5</sup> is alkyl, acyl, alkoxy, -(O)-(CH<sub>2</sub>)<sub>x</sub>-(O)-alkyl, or -NR<sup>6</sup>R<sup>7</sup>,

where R<sup>6</sup> and R<sup>7</sup> are each independently H or alkyl, or

$R^6$  and  $R^7$  combine to form a 5- or 6-membered ring, optionally containing one or more additional heteroatoms, optionally containing one or more degrees of unsaturation, and optionally substituted one or more times with alkyl, hydroxy, carboxy, acyl, alkoxy, or halogen,

or  $R^3$  and  $R^4$  combine to form a 5- or 6-membered ring, optionally containing one or more additional heteroatoms, optionally containing one or more degrees of unsaturation, and optionally substituted one or more times with alkyl, hydroxy, carboxy, alkoxy, acyl, or halogen;

wherein  $D^2$  is



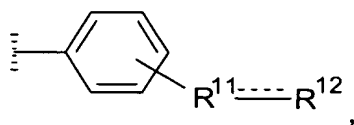
and  $R^8$  is alkyl, or  $-NR^9R^{10}$ ,

where  $R^9$  and  $R^{10}$  are each independently selected from H, alkyl, or  $-(CH_2)_x-NR^6R^7$ ,

where  $R^6$  and  $R^7$  are each independently H or alkyl,

or  $R^6$  and  $R^7$  combine to form a 5- or 6-membered ring, optionally containing one or more additional heteroatoms, optionally containing one or more degrees of unsaturation, and optionally substituted one or more times with alkyl, hydroxy, carboxy, acyl, alkoxy, or halogen;

wherein  $D^3$  is



and

the dashed line represents an optional double bond;

when  $R^{11}$  is  $-(CH_2)_x$ , the optional dashed double bond does not exist,  
and  $R^{12}$  is alkylsulfonyl or  $-NR^{13}R^{14}$ ,

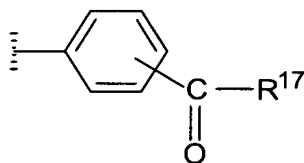
where  $R^{13}$  and  $R^{14}$  are each independently selected from H, alkyl,  
 $-(CH_2)_x-R^{17}$ , where  $R^{17}$  is alkoxy or  $-NR^{15}R^{16}$ ,

where  $R^{15}$  and  $R^{16}$  are each independently H or alkyl,

or  $R^{13}$  and  $R^{14}$  combine to form a 5- or 6-membered ring,  
optionally containing one or more additional heteroatoms,  
optionally containing one or more degrees of unsaturation, and  
optionally substituted one or more times with alkyl or  $-(CH_2)_x-OH$ ;

when  $R^{11}$  is  $-(CH)-$ , the optional dashed double bond exists, and  $R^{12}$  is  $-(CH)-C(O)-OH$ ;

wherein  $D^4$  is



and  $R^{17}$  is hydroxy, alkoxy, or  $-NR^{18}R^{19}$ ,

where  $R^{18}$  and  $R^{19}$  are each independently selected from H, alkyl,  $-(CH_2)_x-R^{20}$ ,

where  $R^{20}$  is alkylsulfonyl, hydroxy, aryl said aryl optionally  
substituted with hydroxy or alkoxy, heteroaryl, or  $-NR^{21}R^{22}$ ,

where  $R^{21}$  and  $R^{22}$  are each independently selected from H, acyl, alkyl,

or  $R^{21}$  and  $R^{22}$  combine to form a 5- or 6-membered ring, optionally containing one or more additional heteroatoms, optionally containing one or more degrees of unsaturation, and optionally substituted with alkyl or  $-(CH_2)_x-OH$ ;

or  $R^{18}$  and  $R^{19}$  combine to form a 5- or 6-membered ring, optionally containing one or more additional heteroatoms, optionally containing one or more degrees of unsaturation, and optionally substituted with  $-(CH_2)_x-R^{23}$ ,

where  $R^{23}$  is alkoxy, hydroxy,  $-C(O)-R^{24}$ , where  $R^{24}$  is a 5- or 6- membered ring optionally containing one or more heteroatoms and optionally containing one or more degrees of unsaturation, or  $-NR^{25}R^{26}$ , where  $R^{25}$  and  $R^{26}$  are each independently H or alkyl;

wherein  $D^5$  is

a 5- or 6- membered ring, optionally containing one or more heteroatoms, optionally containing one or more degrees of unsaturation, optionally fused with an additional 5- or 6- membered ring that optionally contains one or more heteroatoms and optionally contains one or more degrees of unsaturation,

wherein the ring or fused ring system may be optionally substituted one or more times with halogen, alkyl, haloalkyl, alkylsulfonyl, alkylthio, hydroxy, alkoxy, oxo, sulfonyl, sulfate ion, nitro, cyano, carboxy, alkoxycarbonyl, aryl where said aryl may be

optionally substituted with sulfamoyl, heteroaryl where said heteroaryl may be optionally substituted with alkyl, or  $-NR^{27}R^{28}$ ,

where  $R^{27}$  and  $R^{28}$  are each independently H, alkyl, acyl, alkoxy, alkoxycarbonyl, carboxy, or  $-(CH_2)_x-NR^{29}R^{30}$ , where  $R^{29}$  and  $R^{30}$  are each independently selected from H and alkyl,

or  $R^{27}$  and  $R^{28}$  combine to form a 5- or 6- membered ring, optionally containing one or more additional heteroatoms, optionally containing one or more degrees of unsaturation, and optionally substituted one or more times with alkyl, hydroxy, carboxy, acyl, alkoxy, or halogen,

or  $-(O)_y-(CH_2)_x-R^{31}$ , where  $R^{31}$  is hydroxy, alkoxy, haloalkyl, aryl optionally substituted with halogen, or  $-NR^{27}R^{28}$ , where  $R^{27}$  and  $R^{28}$  are as defined above;

wherein for each occurrence, x independently is 0, 1, 2, or 3;

wherein for each occurrence, y independently is 0 or 1; and

and  $R^2$  is heteroaryl substituted one or more times with alkyl, alkoxy, halogen, haloalkyl, haloalkoxy, nitro, or  $-NR^{31}R^{32}$ , wherein  $R^{31}$  and  $R^{32}$  are each independently selected from H and alkyl.

Claim 2 (Original): The compound of claim 1 wherein  $R^2$  is pyridinyl.

Claim 3 (Original): The compound of claim 2 wherein  $R^2$  is pyridinyl substituted with alkoxy.

Claims 4-7 (Cancelled)

Claim 8 (Original): The compound of claim 1 wherein R<sup>2</sup> is thiazolyl.

Claim 9 (Original): The compound of claim 1 wherein R<sup>2</sup> is benzimidazolyl.

Claim 10 (Cancelled)

Claim 11 (Currently Amended): A pharmaceutical composition comprising:

a therapeutically effective amount of a compound as claimed in claim  
~~claims 1 to 9~~.

Claim 12 (Currently Amended): The pharmaceutical composition of claim 11  
~~10~~ further comprising:

one or more of pharmaceutically acceptable carriers, diluents, or  
excipients.

Claim 13 (Currently Amended): A method of treating a disorder in a mammal,  
said disorder being characterized by misregulation of one or more protein  
kinase comprising:

administering to said mammal a therapeutically effective amount of a  
compound as claimed in claim ~~claims 1 to 9~~.

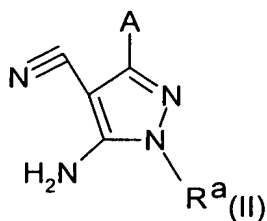
Claim 14 (Cancelled)

Claim 15 (Original): The method of claim 13 wherein the kinase is GSK3.

Claim 16-19 (Cancelled)

Claim 20 (Currently Amended) A compound according to claim ~~any of claims~~  
~~1-9~~ with reference to any of the Examples.

Claim 21 (Original) A compound of Formula (II):



including salts, solvates, and pharmaceutically functional derivatives thereof, where A is H, alkyl, or aryl; and

R<sup>a</sup> is heteroaryl substituted one or more times with alkyl, alkoxy, halogen, haloalkyl, haloalkoxy, nitro, or -NR<sup>b</sup>R<sup>c</sup>, wherein R<sup>b</sup> and R<sup>c</sup> are each independently selected from H and alkyl.

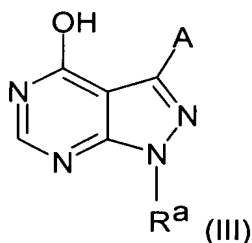
Claim 22 (Cancelled)

Claim 23 (Currently Amended): The compound of claim 21 ~~23~~ wherein R<sup>a</sup> is selected from 2-pyridyl, thiazolyl, or benzimidazolyl.

Claim 24 (Currently Amended) The compound of claim 21 ~~24~~ wherein R<sup>a</sup> is 2-pyridyl substituted with alkoxy.

Claim 25 (Cancelled)

Claim 26 (Original) A compound of formula (III)



including salts, solvates, and pharmaceutically functional derivatives thereof, where A is H, alkyl, or aryl; and

R<sup>a</sup> is heteroaryl substituted one or more times with alkyl, alkoxy, halogen, haloalkyl, haloalkoxy, nitro, or -NR<sup>b</sup>R<sup>c</sup>, wherein R<sup>b</sup> and R<sup>c</sup> are each independently selected from H and alkyl.

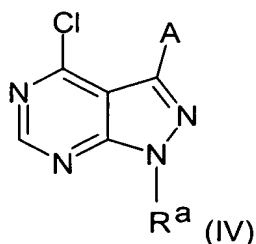
Claim 27 (Cancelled)

Claim 28 (Currently Amended): The compound of claim 26 ~~28~~ wherein R<sup>a</sup> is selected from pyridyl, thiazolyl, or benzimidazolyl.

Claim 29 (Currently Amended): The compound of claim 26 ~~29~~ wherein R<sup>a</sup> is pyridyl substituted with alkoxy.

Claim 30 (Cancelled)

Claim 31 (Original) A compound of formula (IV)



including salts, solvates, and pharmaceutically functional derivatives thereof, where A is H, alkyl, or aryl; and R<sup>a</sup> is heteroaryl substituted one or more times with alkyl, alkoxy, halogen, haloalkyl, haloalkoxy, nitro, or -NR<sup>b</sup>R<sup>c</sup>, wherein R<sup>b</sup> and R<sup>c</sup> are each independently selected from H and alkyl.

Claim 32 (Cancelled)

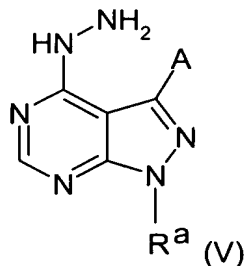
Claim 33 (Currently Amended) The compound of claim 31 ~~33~~ wherein R<sup>a</sup> is selected from pyridyl, thiazolyl, or benzimidazolyl.

Claim 34 (Currently Amended) The compound of claim 31 ~~34~~ wherein R<sup>a</sup> is pyridyl substituted with alkoxy.

Claim 35 (Cancelled)



Claim 36 (Original) A compound of formula (V)



including salts, solvates, and pharmaceutically functional derivatives thereof, where A is H, alkyl, or aryl; and

R<sup>a</sup> is heteroaryl substituted one or more times with alkyl, alkoxy, halogen, haloalkyl, haloalkoxy, nitro, or -NR<sup>b</sup>R<sup>c</sup>, wherein R<sup>b</sup> and R<sup>c</sup> are each independently selected from H and alkyl.

Claim 37 (Cancelled)

Claim 38 (Currently Amended) The compound of claim 36 ~~38~~ wherein R<sup>a</sup> is selected from pyridyl, thiazolyl, or benzimidazolyl.

Claim 39 (Currently Amended) The compound of claim 36 ~~39~~ wherein R<sup>a</sup> is pyridyl substituted with alkoxy.

Claim 40 (Cancelled)